

The *Microvolt*

November, 2014



Homebrew Night

Prologue

Publication: *The Microvolt* (USPS 075-430) is the official publication of the Utah Amateur Radio Club, Incorporated, 699 E. South Temple Ste 100, Salt Lake City, UT 84102-1282. It is published monthly except August. Subscription is included with club membership at \$17 per year. Single copy price is \$1.50. Periodicals postage paid at Salt Lake City, Utah. Postmaster: send address corrections to *The Microvolt*, c/o Dick Keddington, 5474 Hews Place, Taylorsville, UT, 84129-1416.

Deadline for submissions is the 24th of each month prior to publication. Submissions by email are preferred (k7hfv@arrl.net), but other means including diskettes and typewritten submissions can be mailed directly to: Gordon Smith, 632 University St., Salt Lake City, UT 84102-3213. Reprints are allowed with proper credits to *The Microvolt*, UARC, and authors. Changes in mailing address should be communicated to the Club Secretary: Dick Keddington, 5474 Hews Place, Taylorsville, UT, 84129-1416.

Club: The Utah Amateur Radio Club was organized under its present name in 1927, although its beginnings may date back as early as 1909. In 1928, it became affiliated with the American Radio Relay League (club #1602) and is a non-profit organization under the laws of Utah. It holds a club station license with the call W7SP, a memorial call for Leonard (Zim) Zimmerman, an amateur radio pioneer in the Salt Lake City area.

Meetings: The club meets each month except July and August. The meetings are held on the second Thursday of the month at 7:30 PM in the University of Utah's Warnock Engineering Building, generally in room 1230 or 2230, sometimes in 2250 or 105.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$17 per year, including a *Microvolt* subscription. *The Microvolt* and membership cannot be separated. Those living at the same address as a member who has paid \$17 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 5474 Hews Place, Taylorsville, UT 84129-1416.

Contributions: Monetary contributions are gladly accepted. Send directly to the Club Treasurer: Chuck Johnson, 1612 W. 4915 S. Taylorsville, UT 84123-4244. For in-kind contributions, please contact any board member to make appropriate arrangements.

Repeaters: UARC maintains the 146.62- and 146.76- repeaters. The repeaters are administered by the UARC Repeater Committee. Comments and questions may be directed to any Committee member. The Lake Mountain repeater (146.76-) is IRLP node 3352. Instructions for IRLP use are on the club website.

Ham Hot-Line: The Utah Amateur Radio Club (UARC) has a Ham Hotline, 583-3002. Information regarding Amateur Radio can be obtained, including club, testing, meeting, and membership information. If no one answers leave your name, telephone number and a short message on the answering machine, and your call will be returned.

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Imm. Past Pres: Linda Reeder, N7HVF	801 364-7006

Committee Chairpersons and Members

“Book Lady”: Brett Sutherland, N7KG	801 298-5399
Historian: Ron Speirs, K7RLS	801 904-3587
Field Day Chair: (To be determined)	
License Trustee: Brett Sutherland, N7KG	801 298-5399
Repeater Engineer: Randy Finch, K7SL	801 556-7565
ATV Engineer: Clint Turner, KA7OEI	801 566-4497
Autopatch Engineer: Gordon Smith, K7HFV	801 582-2438

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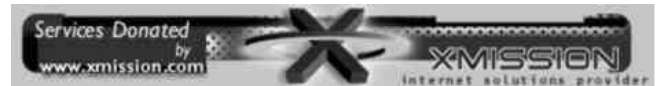
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IRLP Information

For information on using the club's IRLP node on the 146.76 repeater, check <http://user.utaharc.org/irlp>.

For late breaking news listen to the UARC Information Net Sundays at 21:00 on 146.62 or set your browser to: <http://user.xmission.com/~uarc/announce.html>

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The Microvolt

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Volume 57, Issue 10, November 2014

November Meeting: Early Radio Techniques

What was ham radio like in 1910? What was the radiotelegraphy mode that preceded CW? How did they make radio receivers before vacuum tubes were invented? What does a spark transmitter sound like? These are some of the questions that will be answered in the November UARC meeting to be held on Thursday, November 13.

Several hams have been studying the old techniques and even creating modern versions of the old technology. Come see and hear some demonstrations of the way things sounded 100 years ago.

The meeting will be on Thursday, November 13, at 7:30 P.M. in room 1250 (main floor, south side of the main corridor) of the Warnock Engineering Building.

UARC meetings are held on the second Thursday of each month at 7:30 P.M., in the Warnock Engineering Building on the University of Utah campus. The fall, 2014, meetings will be in room 1250 on the ground floor. See the [map](http://user.xmission.com/~uarc/meetmap.html) at user.xmission.com/~uarc/meetmap.html for information on finding the building. The room number varies depending on availability.

Of course, the meeting will include the “standard” meeting features:

- Availability of ARRL books from Brett, the “book lady”
- An opportunity to join UARC or renew your membership
- An opportunity to join ARRL or renew your membership
- The chance to meet face-to-face the people you talk to on the air
- The “Meeting after the meeting”: A chance to enjoy pizza or other gastronomic delights with other hams. It happens at Litza's Pizza, 716 E. 400 South.
- The “Meeting *before* the meeting”: A similar get-together for those who can leave work early enough to get there by 5:15 P.M. The November get-together will be at “Crown Burger,” 377 E. 200 South in Salt Lake City.

Latest News

Our Cover

Our cover this month features photos by our Club Historian, Ron Speirs, K7RLS, of projects shown

at UARC’s annual Homebrew Night held this year on October 9. Starting from the upper left we have Bob Harbrecht, KE7QEQ, showing his code trainer; Pat Malan, N7PAT, and a set of

transceivers configurable for band and mode; Rolan Carr, KA7PGH, showing a scheme for labeling cables and accessories; and Gary Wong, AB1IP, pairing an original control panel and microprocessor with the RF guts of a Baufering H-T. On the bottom row is Glen Worthington, WA7X, who modified a Radio Shack Weather Radio to monitor the two-meter band; Clint Turner, KA7OEI's version of the M0NKA Software-defined-radio HF transceiver; and, finally, Clint and Glen showing Clint's shake-powered 10-meter DSB transceiver.

Check the "Current News" page on the UARC web site for additional photos.

Nominations This Month

It is time to start thinking about who we should choose for club officers for 2015. As prescribed by the club bylaws, the floor will be opened for nominations at the November 13 meeting, then a nominating committee's choices will be presented, and finally, nominations from the floor will be accepted a second time.

See the inside front cover for a list of the offices and volunteer positions. If you have wanted to get more involved in the hobby, perhaps you might want to volunteer for an office, or know someone who would do a good job. Think about it before the meeting.

License Classes in Early 2015

There will be a "Long Form" Technician course starting on January 12th. The course will be taught by Morris Farmer, AD7SR, and Bill Rouleau, AE7UI. Location will be Morris' home and the schedule will be Mondays at 7 P.M. for approximately 7 - 8 weeks. For more information contact Morris at f.morris1@comcast.net or Bill at wrouleau@comcast.net. A General course will be taught after the Technician course.

There will be an Extra course starting on Wednesday January 14th. The course will be taught by Ron Speirs, K7RLS, and Morris Farmer, AD7SR. It will be at Morris' home each Wednesday at 7 P.M., for approximately 15-16 weeks. For more information contact Morris at f.morris1@comcast.net or Ron at k7rls@comcast.net.

-Morris Farmer AD7SR

'76 Gets New Antennas

On Saturday, October 18, some long-anticipated changes were made to the antenna complement on UARC's 146.76 repeater on Lake Mountain. Most of the tower work (particularly that at the 120-foot level) was done by certified climbers from the Christensen and Griffith firm.

The 2-meter receiving antenna (a "temporary" J-pole installed in 2009) was replaced with a refurbished double folded-dipole colinear. The link receiving antenna, a Yagi, was replaced by a somewhat beefier Yagi. The two-meter transmitting antenna was replaced with a new Sinclair fiberglass-encased colinear rated at 8 dB_i gain. (The old one will likely be recoated and reused.)

The change that is expected to be most noticeable is the addition of a secondary transmitting antenna to fill in a pattern null that had been present since 1997 when we moved from the old 100-foot tower. The location assigned to us for our transmitting antenna had a good view toward Utah County but was blocked toward the west side of Salt Lake Valley by another user's microwave dish. The new arrangement takes a portion of the transmitter power and sends it to a three-element Yagi positioned to "look around" the offending dish. Initial reports appear favorable.

For a more detailed report check the "Current Repeater Status" page on the UARC web site (<http://www.utaharc.org/>).

The Microvolt November 2014



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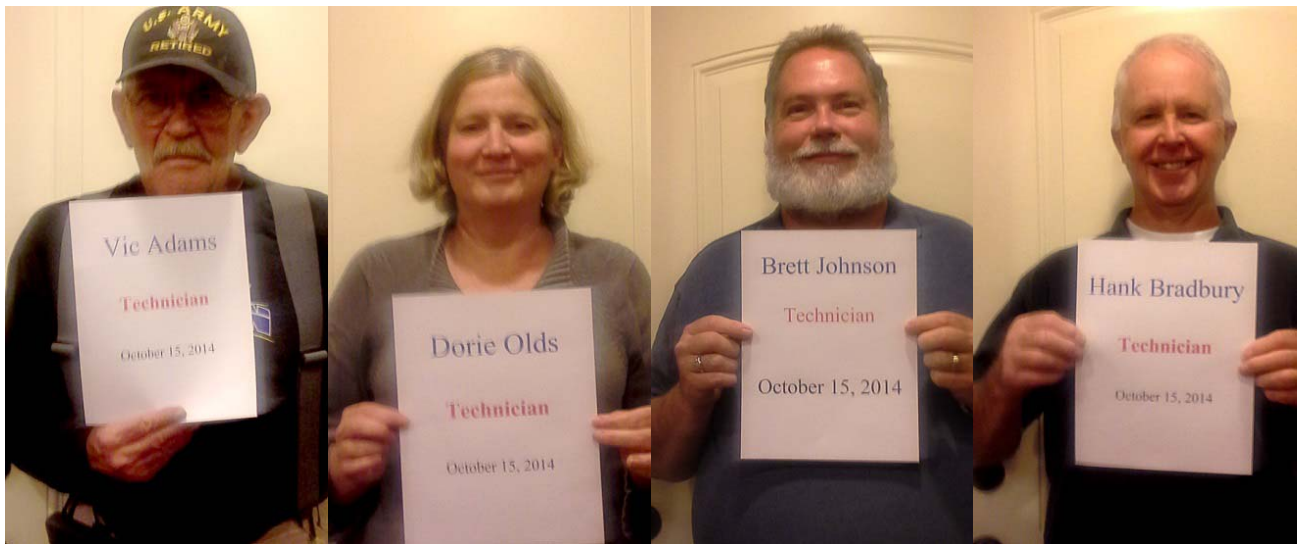
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Technician Class Concludes

By Morris Farmer, AD7SR

The “long form” Technician class taught by Morris Farmer, AD7SR; Bill Rouleau, AE7UI; and with Doug Bosen, KG7GOV, filling in where needed, completed on October 13th. In order to complete the Technician course and still have time for the General course to complete by Thanksgiving, it had required several extra class days to be thrown in. However, the students

worked hard and their hard work paid off with high scores on the exam given on October 15th. Whether they liked the course so much, or are simply gluttons for punishment, I’m not sure, but all four are enrolled in the General course now underway.



License Examination Schedule

Opportunities to test for new or upgraded amateur licenses

Date	Day	City	Contact Person	Phone
11/19/14	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983
11/19/14	(Wed.)	St. George ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
11/25/14	(Tue.)	Salt Lake City ³	Eugene McWherter, N7OVT	(801) 541-1871
12/06/14	(Sat.)	Salt Lake City ^{1,4}	Gordon Smith, K7HFV	(801) 582-2438
12/06/14	(Sat.)	Logan ¹	V. Phillip Rasmussen, N7JFG	(435) 770-0630
12/06/14	(Sat.)	Logan	Richard D. Elwood, KE7GYD	(435) 753-4360
12/13/14	(Sat.)	Hurricane ²	Gary O. Zabriskie, N7ARE	(435) 674-2678
12/17/14	(Wed.)	Provo	Steve Whitehead, NV7V	(801) 465-3983

¹Preregistration required. Check with the contact person before the test session.

²More information at <http://www.dixieham.org/meetings.html>

³New location: Senior Center at the Columbus Center, 2530 S. 500 East

⁴More information at <http://www.utaharc.org/Exams/>

Check <http://user.xmission.com/~uarc/testinfo.html> for further exam information.

Member of the Month Shon Edwards, K6QT

By Linda Reeder, N7HVF

This month we are featuring Shon Edwards K6QT. Shon is the father of James Edwards who we featured in the October issue of *The Microvolt*.

Shon has been in amateur radio since 1997. He became interested in the hobby in 1978 when he was attending Orem Junior High School. Shon's math and science teacher, William H. Anderson, W7UKD, had a ham station set up in the classroom. He let his students talk as third parties on 80 meters. Mr. Anderson had a Yagi antenna.

When Shon attended Timpview High School he had another teacher who was an amateur radio operator. Vern Bangerter, W7GAG, Shon's electronics and physics teacher, also had a ham station in his classroom. The students were able to talk around the world on 20 meters. The teacher would send pictures of the electronic classes around the world. Shon was very impressed. He knew then that what he wanted was to get involved in amateur radio. However, amateur radio got put on the back burner for awhile.

Shon was very busy with college and raising a family. Shon and his wife, Roya, have five children: four boys and one girl. Shon has his bachelor's degree in the German language and his master's degree in linguistics. For 15 years Shon worked for Family Search, cataloging genealogical information. Shon also worked for Novell for four years. Shon said his time with this company was valuable for developing his skills for amateur radio. Shon now has his own business working with genealogy clients from all over the world.

Shon really loves amateur radio. He would like to thank Utah County for helping him to finally get into the hobby.

Shon's LDS Stake President was very active in getting

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members of the Stake into amateur radio. They would get together and study the Morse Code. They used a scheme called "Code Quick" that helped them learn the code.

Shon said he found it easier to copy the code by typing on a computer than copying by hand, especially when he had to copy 20 words per minute. He is really grateful to them for helping him master the code.

Shon received his Novice, Technician Plus, General, and Advanced licenses in 1997. In 1998 Shon obtained his Extra Class license. Every time Shon would upgrade he would change his call sign. He didn't like the call signs the FCC gave him, except for his Advanced call sign which was KK7JX. However, he gave it up when he obtained his Extra Class license. He didn't like that call sign at all so his son, James, took that call sign which is AB7XT. Shon tried to get his Advanced call sign back but it was already taken. The reason Shon likes vanity calls is that you can pick the one you want. Shon picked his call signs by the way the letters sound together. He said it took awhile to find the call sign that sounded good together. He finally chose K6QT.

Shon is a member of UARC. He is also a member of the emergency response team. He was very active in the emergency group when he lived in Provo.

Shon enjoys Genealogy and the study of language. He also enjoys hiking, but can't do too much hiking now because of his back. He has had four back operations.

Shon, we wish you the best in all of your endeavors.